

REMARKS

The claims now pending in this application are Claims 1-19, with Claims 1, 2, 4, 6, 9, 10, 12, 14, and 17-19 being the independent claims. Claims 1, 9, and 17 have been amended. No claims have been cancelled or added. Claims 2, 4-8, 10, 12-16, 18, and 19 were previously allowed.

In the Official Action dated May 7, 2003, Claims 1, 3, 9, 11 and 17 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,890,118 (Kagoshima, et al.). Reconsideration and withdrawal of this rejection is requested in view of the above amendments and the following remarks.

Independent Claim 1 is directed to a speech synthesis control apparatus for reducing a size of pitch mark data files in performing speech synthesis by using pitch marks. The apparatus comprises a first calculation means, a second calculation means, a third calculation means, and a management means. The first calculation means is for calculating a distance between the first two pitch marks of a voiced portion of speech data to be processed. The second calculation means is for calculating inter-pitch-mark distances by calculating distances between adjacent pitch marks. The third calculation means is for calculating a difference between the adjacent inter-pitch-mark distances. The management means is for storing the calculation results obtained by the first and the third calculation means in a file and managing the results.

The Kagoshima, et al. patent is directed to a speech synthesis apparatus that interpolates between typical waveforms read from a memory means to obtain a plurality of interpolation signals, each having at least one of an interpolation pitch period and a signal level which changes smoothly between corresponding frames.

However, Kagoshima, et al. fails to disclose or suggest the above-described features of the present invention. In particular, Kagoshima, et al fails to disclose or suggest second calculation means for calculating inter-pitch-mark distances by calculating distances between adjacent pitch marks, third calculation means for calculating a difference between the adjacent inter-pitch-mark distances, and management means for storing the calculation results obtained by the first and the third calculation means in a file and managing the results.

The Official Action dated May 7, 2003, asserts that the Kagoshima, et al. teaches calculating the distance between two pitch marks at column 6, lines 61-67 and Figure 4 of that patent. The cited text indicates that the first (101) and second (302) pitch period information is supplied to a pitch interpolation section (32) that performs pitch interpolation on the basis of these first two pitch periods. Figure 4 of that patent simply shows pitch marks m_0 through m_5 . However, the cited text and Figure 4 fail to specify how to calculate the distance between pitch marks.

In contrast, the present application specifies how to calculate the distance between pitch marks (i.e., inter-pitch-mark distances), as well as the difference between adjacent inter-pitch-mark distances. In response to the comments at the bottom of page 3 of the Official Action, Applicants have amended Claims 1, 9, and 17 to better clarify how these various calculations are accomplished and stored.

For the aforementioned reasons, Claim 1 is allowable over the cited art. Independent Claims 9 and 17 relate to a control method and a computer-readable memory storing program codes, respectively, and are allowable for similar reasons.

The dependent Claims 3 and 11 depend from Claims 1 and 9, respectively, and are believed allowable for the same reasons. Moreover, each of these dependent claims recite

additional features in combination with the features of their respective independent claims and is believed allowable in its own right. Individual consideration of the dependent claims respectfully is requested.

Applicants respectfully request entry of this Amendment After Final Rejection as it is being presented in an earnest effort to advance prosecution and place the application in condition for allowance. Applicants respectfully submit that this amendment was not previously presented as Applicants were of the firm belief that the claims on file were in allowable form.

Favorable consideration of the claims and early passage to issue of the present application earnestly are solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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